

Three species of the genus *Robertus* (Araneae: Theridiidae) from Chugoku District, Honshu, Japan

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Abstract — Three species of the genus *Robertus* are recorded from Chugoku District, Honshu, Japan. One of them, *R. nojimai*, is described as a new species. The other two species, *R. sibiricus* Eskov 1987 and *R. saitoi* Yoshida 1995, are newly recorded from Okayama and Tottori Prefectures.

Key words — *Robertus*, Theridiidae, new species, new records, Chugoku District, Japan

In my previous papers (Yoshida 1995, 2001), six species of the genus *Robertus* were described or recorded from Japan. In Chugoku District, Honshu, only one specimen of *R. saitoi* Yoshida 1995 has been recorded from Shimane Prefecture (Kamura et al. 1999). Recently, Mr. Koichi Nojima, Osaka, collected many specimens of *Robertus* from Okayama and Tottori Prefectures. Examination of the specimens revealed that they are divided into three species: *R. saitoi* and *R. sibiricus* Eskov 1987, which are already known from Japan; and one species which does not conform to any other species known from Japan. In this paper, I describe the last species as new and present additional collecting data of the two known species.

Prefectural names are capitalized in the list of “specimens examined”. Depositories of specimens excluding my private collection are given in abbreviations: NSMT-Ar, the Araneae Collection of the Department of Zoology, National Science Museum, Tokyo; ZMMU, Zoological Museum of the Moscow State University, Moscow, Russia.

Robertus O. Pickard-Cambridge 1879
[Japanese name: Morihimegumo zoku]

Robertus O. Pickard-Cambridge 1879, p. 103 (Type species: *Robertus neglectus* O. Pickard-Cambridge 1879).

Robertus sibiricus Eskov 1987
[Japanese name: Kita-morihimegumo]

Robertus sibiricus Eskov 1987, p. 287, figs. 14–17 (holotype: ♂ from boggy forest of depressed *Larix dahurica* with *Andromeda palustris* and *Betula nana*, delta of Chambe River, Taymura River, Evenk Autonomous Region, Krasnoyarsk area, Siberia, Russia, 23-VIII-1982, K. Eskov leg., in ZMMU)—Ono et al. 1991, p. 92, figs. 9–13; Matsuda 1996, p. 63; Yoshida 2001, p. 32, figs. 1–4.

Note. In Japan, this species has so far been recorded only from Hokkaido. Specimens listed below are the first record in Honshu.

Specimens examined. OKAYAMA: 1♂, Kenashi-yama, Shinjo-son, 30-V-1994. TOTTORI: 1♀1♂, Kadonokami, Nichinan-cho, 24-XI-1992. All collected by Koichi Nojima.

Distribution. Japan: Hokkaido and Honshu (Okayama and Tottori Prefectures). Russia.

Robertus saitoi Yoshida 1995
[Japanese name: Saito-morihimegumo]
(Figs. 1–3)

Robertus saitoi Yoshida 1995, p. 153, figs. 1–4 (holotype: ♂ from Watarase-yūsuichi, Fujioka-machi, Tochigi Prefecture, Japan, 25-V-1984, H. Saito leg., NSMT-Ar 3313)—Kamura et al. 1999, p. 45; Yoshida 2001, p. 35.

Note. I described this species based on the specimens from Tochigi Prefecture, Kanto District in 1995 and later Kamura et al. recorded it from Shimane Prefecture, Chugoku District in 1999. The latter specimen was also examined in this study. Male palpus illustrated in Figs. 1–3 is based on a specimen from Chuka-son, Okayama Prefecture.

This species was collected at the grassy plain; five localities are on riversides and one in an uncultivated plowed field (Nojima pers. comm.). Among the *Robertus* species, three species, *R. saitoi*, *R. nipponicus* and *R. kastoni*, seem to usually live in the grassy plain, while the other four, *R. nojimai* new species, *R. ogatai*, *R. yasudai* and *R. sibiricus*, in forest.

Specimens examined. OKAYAMA: 1♂, Imotoyama, Mabicho, 13-VII-1995; 1♂, Shimokajiya, Chuka-son, 17-VI-1998, (NSMT-Ar 5267). TOTTORI: 1♂, Tamahoko, Kokufu-cho, 9-V-1994; 1♂, Yuya, Misasa-cho, 30-VII-1996. Former specimens collected by Koichi Nojima. SHIMANE: 1♂, Shimokumagai, Kisuki-cho, 23-VII-1997, Mitsuo Saito leg.

Other records (Nojima pers. comm.). OKAYAMA: 1♂, Matsuyama-hirose, Takahashi-shi, 9-XI-1991; 1♂, Nishimura, Soja-shi, 3-XI-1992. All collected by Koichi Nojima.

Distribution. Japan: Honshu (Tochigi, Okayama, Tottori and Shimane Prefectures).

***Robertus nojimai* new species**
 [Japanese name: Nojima-morihimegumo]
 (Figs. 4–9)

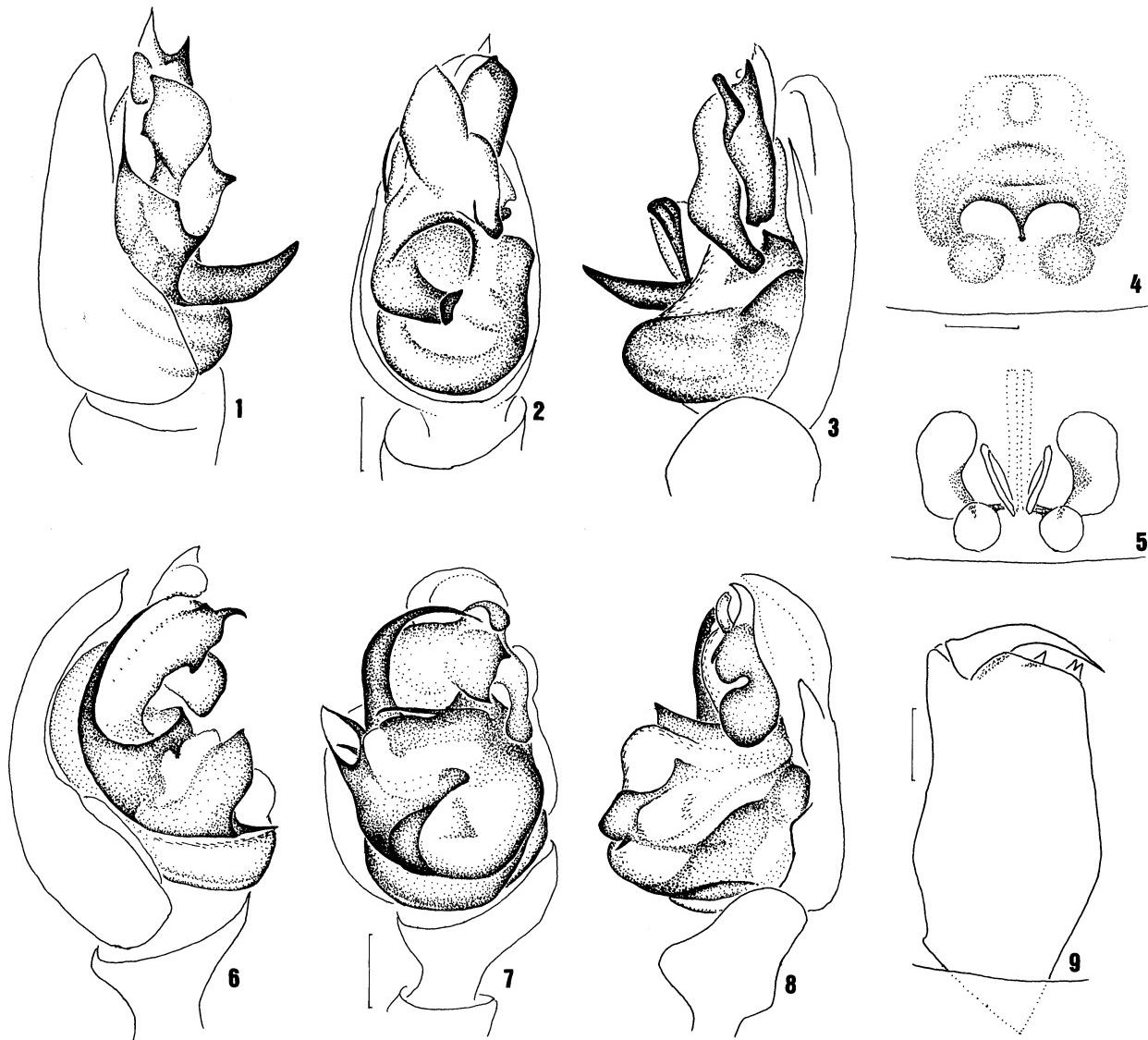
Diagnosis. This species resembles *R. saitoi* Yoshida 1995 and *R. nipponicus* Yoshida 1995, but is distinguished from the latter two species by male palpus with a distally projecting embolus and a thick conductor.

Description. Carapace oval, convex. Chelicera with three

teeth on the anterior margin of fang furrow, basal two conjugated at the base (Fig. 9). Legs stout with macrosetae, relatively short; first and forth patella and tibia slightly shorter than carapace length. Leg formula, 4, 1, 2, 3 in female, 1, 4, 2, 3 in male; first and fourth legs nearly equal in length. Abdomen oval.

Female genitalia as shown in Figs. 4–5: epigynum with an anterior opening; ducts long, extending to the opening; seminal receptacles separated into two parts, the anterior part large tumbler and the posterior one globe.

Male palpus as shown in Figs. 6–8: embolus thick and long, distally projecting and curved clockwise; conductor large, the distal tip supporting as an embolus guide, laterally with a large membranous projection; tegular apophysis large and concave, forming a horse ear-like projection; cymbium



Figs. 1–9. *Robertus saitoi* Yoshida 1995, ♂ from Chuka-son, Okayama Pref. (1–3), and *R. nojimai* new species, ♀ allotype and ♂ holotype (4–9)—1–3, 6–8, male left palpus, prolateral (1, 6), ventral (2, 7) and retrolateral (3, 8) view; 4, epigynum, ventral view; 5, female internal genitalia, dorsal view; 9, male left chelicera, anterior view. Scales: 0.1 mm.

with a hooked paracymbium.

Coloration. Cephalothorax brown. Eyes on the dark bases. Abdomen grayish brown with dusky flecks and dorsally with two pairs of brown disks.

Measurements (in mm, ♀ allotype/♂ holotype). Body length 2.68/2.16. Carapace length 1.08/1.05; width 0.82/0.82. Abdomen length 1.60/1.11; width 1.29/0.87; height 1.50/1.03. First leg: femur 0.80/0.87; patella and tibia 1.00/1.03; metatarsus 0.45/0.53; tarsus 0.39/0.39. Second patella and tibia 0.79/0.84; third patella and tibia 0.63/0.68; fourth patella and tibia 1.03/1.00. Diameters: anterior median eye 0.04/0.05; anterior lateral eye 0.08/0.08; posterior median eye 0.07/0.08; posterior lateral eye 0.08/0.08. Distances: between anterior median eyes 0.03/0.04; between anterior median and lateral eyes 0.03/0.03; between posterior median eyes 0.07/0.07; between posterior median and lateral eyes 0.04/0.05. Median ocular area, anterior width 0.13/0.16; posterior width 0.17/0.18; length 0.14/0.13.

Variations. Body length, 2.2–2.7 mm in female.

Note. This species is always collected in forest (Nojima pers. comm.). Adults seem to appear in autumn to spring.

Type series. Holotype: ♂, 3-II-1996, allotype: ♀, 20-IV-1997, and paratypes: 2♀, 20-IV-1997. All collected from Mt. Yukasan, Kurashiki-shi, Okayama Prefecture, Japan, and by Koichi Nojima, (NSMT-Ar 5268-5270).

Other specimens examined. SHIGA: 1♀, Kiwada, Eigenji-cho, 28-X-1998. OKAYAMA: 5♀, Kamitsuchida, Okayama-shi, 2-II-1996; 1♀, Kumegawaminami, Kume-cho, 25-I-1990; 1♀, Osaka, Kasaoka-shi, 25-X-1989; 1♀, Mt. Gagyusan, Takahashi-shi, 27-I-1995. TOTTORI: 1♀, Ashizukei, Chizu-cho, 29-X-1990. All collected by Koichi Nojima.

Distribution. Japan: Honshu (Shiga, Okayama and Tottori Prefectures).

Etymology. The specific name is dedicated to Mr. Koichi Nojima, Osaka, who collected all the specimens of the species including types.

Acknowledgments

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従来ヒメアシダカグモに使用されていた *Sinopoda stellata* (Schenkel 1963) を日本のクモから削除した。同種は中国内陸部に固有の種と考えられる。

スマトラ島のカブリダニ類（ダニ目：カブリダニ科）(pp. 125–133)

江原昭三 (〒680-0001 鳥取市浜坂 2 丁目 15-7) (pp. 125–133)
高藤晃雄氏（京都大学）が 1981 年 12 月にインドネシアのスマトラ島で種々の植物から採集した標本が、この研究に用いられた。12 種のカブリダニが同定され、この中の 1 種は新種で、*Amblyseius (A.) sumatrensis* として記載された。他の 11 種はすべてスマトラからの新記録種である。これらのうち、従来あまりよく知られていない *Amblyseius (Neoseiulus) circellatus* Wu & Li 1983、および *Paraphytoseius seychellensis* Schicha & Corpuz-Raros 1985 については、再記載が与えられた。前者の雄はこのたび初めて記載された。残りの種の大部分については、主要な識別形質が記述された。

中国地方産のモリヒメグモ属（クモ目：ヒメグモ科）の 3 種 (pp. 135–137)

吉田 哉 (〒990-2484 山形市籠田 2 丁目 7 番 16 号)
中国地方からモリヒメグモ属 *Robertus* の 3 種を記録した。そのうちの 1 種、ノジマモリヒメグモ（新称）*R. nojimai*、を新種として記載した。その他の 2 種、キタモリヒメグモ *R. sibiricus* Eskov 1987 およびサイトウモリヒメグモ *R. saitoi* Yoshida 1995、を岡山県および鳥取県から初めて記録した。キタモリヒメグモは本州新記録となる。

長野県産のタカユヒメグモ属（クモ目：ヒメグモ科）の 1 新種 (pp. 139–140)

吉田 哉 (〒990-2484 山形市籠田 2 丁目 7 番 16 号)

長野県産のヒメグモ科タカユヒメグモ属 *Takayus* の 1 新種をフジサワヒメグモ（新称）*T. fujisawai* の名前で記載した。高山村山田牧場の上部標高 1,750 m ほどの尾根部分で、ウラジロモミ（ダケモミ）*Abies homolepis* Sieb. & Zucc. に網を張っているところを採集された。

南西諸島産のユウレイグモ属およびシモングモ属（クモ目、ユウレイグモ科）の 2 新種 (pp. 141–144)

入江照雄 (〒860-0082 熊本市池田 2 丁目 19-11)

南西諸島産のユウレイグモ科の 2 新種、*Pholcus okinawaensis* オキナワユウレイグモ（新称、沖縄島産、与論島産）および *Spermophora yanbaruensis* ヤンバルユウレイグモ（新称、沖縄島産）を記載した。

日本初記録のソルホイオニダニ（ササラダニ亜目：オニダニ科）(pp. 145–147)

島野智之¹、坂田知世²、Roy A. Norton² (〒960-2156 福島市荒井字原宿南 50 東北農業研究センター畑地利用部 畑土壤管理研究室; ²College of Environmental Science and Forestry, State University of New York, USA)

Camisia solhoeyi Colloff (ソルホイオニダニ、新称) を初めて日本から記録した。本種は、胴背毛 h1 が他の胴背毛よりも短いという特徴によって日本に生息する他の近縁な種と区別できる。よく知られている *C. lapponica* (Trägårdh) は、本種と非常によく似ており、以前の *C. lapponica* の日本での記録は、再調査される必要があるかも知れない。